

IN THE CLAIMS:

Please amend claims as follows.

1-12 canceled

13. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the application of an acidic or basic pharmaceutically active substance for the treatment of diseases in humans and mammals.

14. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the inhalative (pulmonary) application of an acidic or basic active substance.

15. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1, wherein the pharmaceutically active substance is a prostanoid.

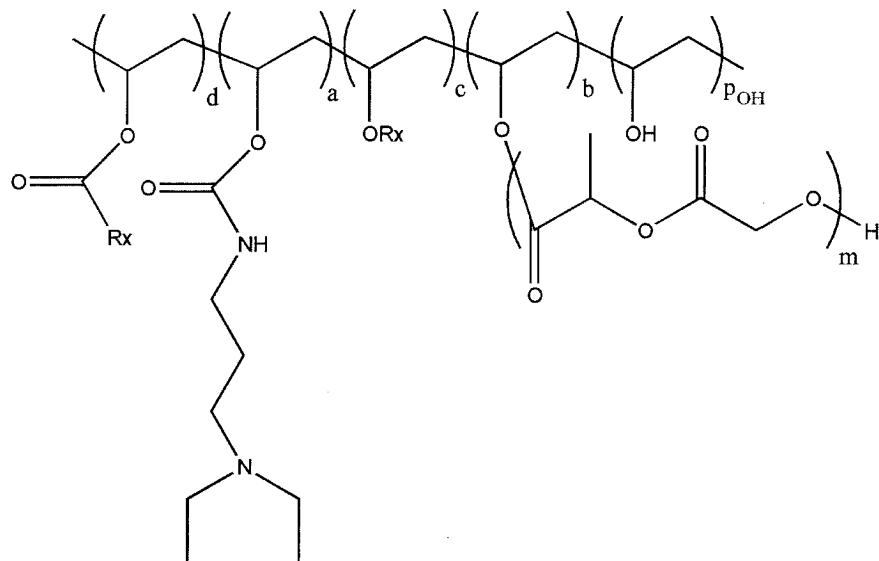
16. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the treatment of pulmonary hypertension.

17. (withdrawn) A method of use according to claim 1, wherein the biodegradable colloidal particles are available in a physiologically compatible aqueous solution.

18-24. canceled

25. (new) Biodegradable colloidal particles comprising

- a) amphiphilic comb polymers comprising a water-soluble polyol backbone, hydrophobic side chains and side chains carrying amino groups, consisting of the formula,



wherein, relating to the number of the free hydroxyl functions n_{OH} of the free polyol backbone

- a is chosen in a way that the side chains carrying amino groups possess a percentage of 0.5% to 50%
- b is chosen in a way that the hydrophobic side chains possess a percentage of 1% to 90%
- c, d 0%
- m can be an integer between 1 and 100, and
- $p_{OH} = n_{OH} - (a+b+c+d)\%$,

wherein

$$n_{OH} = 300,$$

and wherein,

R_x stands for each of these R groups individually and for each monomer independently from one another for a group chosen from H, (C₁-C₁₀)-alkyl, (C₅-C₁₂)-aryl, (C₆-C₂₂)-alkyl aryl and (C₆-C₂₂)-aryl alkyl and wherein R_x can also represent a -(CO)NR'R" group and wherein R_y and R_z can also represent a hydroxyl, (C₁-C₁₀)-alkoxy, carboxy, an OCO alkyl-(C₁-C₁₀) or an O(CO)O alkyl-(C₁-C₁₀) group

and

b) a combination of CMC and one or more pharmaceutically active substance as a stabilizer, wherein the pharmaceutically active substance is a carboxylic acid, sulphonic acid or phosphoric acid, and wherein the acid groups of the stabilizer are in excess or in deficiency in relation to the amino groups of the comb polymer, so that a colloidal solution of the particles features a positive or negative zeta potential.

26. (new) Biodegradable colloidal particles according to claim 25, wherein the pharmaceutically active substance is a prostanoid.

27. (new) Biodegradable colloidal particles according to claim 25, wherein the pharmaceutically active substance is a synthetic analog of prostacyclin.

28. (new) Biodegradable colloidal particles according to claim 25, wherein the proportion of hydrophobic side chains in relation to hydroxyl functions of the backbone lies between 20% and 80%.

29. (new) Biodegradable colloidal particles according to claim 25, wherein the proportion of side chains carrying amino functions in relation to hydroxyl functions of the backbone lies between 2% and 35%, and is particularly preferred to be between 10% and 25%.

30. (new) Biodegradable colloidal particles according to claim 25, wherein the amino groups of the comb polymer are at least partly quaternized by the addition of an organic acid, while the corresponding negatively charged organic base of said organic acid stabilizes the related colloidal particles of such a comb polymer.

31. (new) Biodegradable colloidal particles according to claim 25, wherein the zeta potential of a colloidal solution of the particles lies between -5 and -80 mV or between +5 and +80 mV.

32. (new) Biodegradable colloidal particles according to claim 25, wherein the organic acid is a prostanoid and the zeta potential of a colloidal solution of the particles lies between -10 and -50 mV or between +10 and +50 mV.

33. (new) Biodegradable colloidal particles according to claim 28, wherein the proportion of hydrophobic side chains in relation to hydroxyl functions of the backbone lies between 40% and 70%.

34. (new) Biodegradable colloidal particles according to claim 29, wherein the proportion of side chains carrying amino functions in relation to hydroxyl functions of the backbone lies between 10% and 25%.

35. (new) Method for the production of biodegradable colloidal particles according to claim 25 encompassing the following steps for production:

- a) dissolution of the comb polymer in a water-miscible, volatile organic solvent and
- b) addition of the solution obtained in a) to an isotonic aqueous solution with a pH value between 6.0 and 8.0 comprising, along with a sugar and a buffer, an organic acid, which can be a Lewis or Brønsted acid, or the corresponding base thereof, which can be a Lewis or Brønsted base,
- c) stirring of the solution obtained in (b) for the production of colloidal particles and
- d) removal of the organic solvent.